

Beyond Lab Walls: Strategies for Empowering Postgraduates to Create Positive Social Change through Sea Turtle Conservation

(Beyond Lab Walls: Strategi Memperkasa Siswazah untuk Mencipta Perubahan Sosial Positif melalui Pemuliharaan Penyu)

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ABSTRACT

Postgraduate education often confines graduates to academic roles. However, postgraduates have the potential to offer innovative solutions beyond lab confines. The "Beyond Lab Walls" program aims to provide postgraduates with the skills, perspectives, and mindsets needed for societal engagement. The program encourages participants to view research as a conduit for societal betterment by fostering impactful communication, catalysing interdisciplinary fusion, and igniting transformative shifts. This article highlights the impact of a visit to Chagar Hutang Turtle Sanctuary, which immerses postgraduates in research-driven conservation that intersects with livelihoods and local development. Expected outcomes include skilled communicators bridging knowledge gaps, interdisciplinary synergy spawning innovations, researchers serving as change agents, and broader stakeholder engagement. These findings reshape postgraduate education by bridging the gap between research and its tangible societal consequences. Success metrics assess research impact beyond academia, the depth of interdisciplinary collaborations and track participant attitudes toward societal impact shifts. This article advocates for rethinking postgraduate roles and positions postgraduates as agents of societal change.

Keywords - Leadership, Conservation, Social Innovation, Students Development

ABSTRAK

Pendidikan pasca siswazah sering menghadkan graduan kepada peranan akademik. Walau bagaimanapun, lepasan ijazah mempunyai potensi untuk menawarkan penyelesaian inovatif di luar had makmal. Program "Beyond Lab Walls" bertujuan untuk menyediakan pelajar pascasiswazah dengan kemahiran, perspektif dan minda yang diperlukan untuk penglibatan masyarakat. Program ini menggalakkan para peserta untuk melihat penyelidikan sebagai saluran untuk membaiki masyarakat dengan memupuk komunikasi yang berkesan, memangkin gabungan antara disiplin, dan mencetuskan perubahan transformatif. Artikel ini menyerlahkan kesan lawatan ke Santuari Penyu Chagar Hutang, yang menyelami siswazah dalam pemuliharaan dipacu penyelidikan yang bersilang dengan mata pencarian dan pembangunan tempatan. Hasil yang dijangkakan termasuk komunikator mahir yang merapatkan jurang pengetahuan, sinergi antara disiplin melahirkan inovasi, penyelidik berkhidmat sebagai ejen perubahan dan penglibatan pihak berkepentingan yang lebih luas. Penemuan ini membentuk semula pendidikan pasca siswazah dengan merapatkan jurang antara penyelidikan dan akibat sosial yang ketara. Metrik kejayaan menilai impak penyelidikan melangkaui akademik, kedalaman kerjasama antara disiplin dan menjejaki sikap peserta terhadap anjakan impak masyarakat. Artikel ini menyokong untuk memikirkan semula peranan pasca siswazah dan meletakkan jawatan siswazah sebagai agen perubahan masyarakat.

Kata kunci - Kepimpinan, Pemuliharaan, Inovasi Sosial, Pembangunan Pelajar

INTRODUCTION

Historically, postgraduate education has concentrated on cultivating specialised expertise within narrow fields of study. However, the current landscape calls for a more expansive perspective recognising postgraduates' potential to extend beyond academic pursuits. Their capabilities should encompass the creation of significant societal impact. In a world grappling with intricate challenges like climate change, healthcare disparities, technological shifts, and socioeconomic inequalities, the potential for postgraduates to contribute innovative solutions that transcend laboratory walls is substantial (Rothblatt, 2012). As a result, the imperative to re-imagine the role of postgraduates as transformative agents goes beyond being a mere choice—it is a compelling necessity.

The established postgraduate education model has inadvertently confined graduates to roles as researchers, scientists, or academics. This confinement restricts their capacity to generate meaningful change in the global arena (Arum et al., 2012; Arum & Roksa, 2011). This narrower focus creates a disconnect between postgraduates' skills and perspectives and the multifaceted challenges society confronts. Consequently, innovative solutions to these complex problems remain untapped, and the full potential of postgraduate education remains unrealised.

The urgency of addressing pressing global challenges is paramount. Climate crises, public health emergencies, technological disruptions, and social inequalities demand a unified, interdisciplinary approach (David Civil & Himsworth, 2020). Equipped with advanced knowledge and fresh perspectives, postgraduate students have the unique ability to devise innovative strategies that transcend traditional academic boundaries. By empowering postgraduates to apply their expertise across diverse contexts (Kelsky, 2015; Schon, 2017), we can bridge the gap between theoretical knowledge and the practical needs of society, nurturing a new generation of change-makers.

In conventional academic paradigms, the value of research is often confined to its contributions within academic circles. However, the proposed program seeks to expand this limited perspective. It unveils the capacity of postgraduate research to resonate far beyond the academic realm. Through compelling case studies, rigorous analyses, and inspiring success stories Bloom et al. (1999), paper vividly illustrates how postgraduate research possesses the potential to instigate nationwide change. By showcasing how research outcomes can directly influence policy decisions, shape developmental agendas, and revolutionise industries, the program

underscores the critical need to extend postgraduate efforts beyond traditional confines.

RESEARCH SIGNIFICANCE

The "Beyond Lab Walls" program is designed to achieve a triad of central objectives, each strategically tailored to equip postgraduate scholars with the skills, perspectives, and mindsets necessary to extend their impact beyond the traditional academic realm. Through this paradigm shift ability to convey the relevance and implications of their work, postgraduates will be better equipped to foster understanding, catalyse support, and inspire informed decision-making across varied sectors of society.

MATERIALS AND METHODS

The Chagar Hutang Turtle Sanctuary (CHTS) excursion program offers a transformative experience for postgraduate students from the Institute of Oceanography and Environment as they embark on a journey to the Chagar Hutang Turtle Sanctuary. This immersive initiative is meticulously designed to provide participants with firsthand exposure to the remarkable work of the Sea Turtle Research Unit (SEATRU), unveiling a paradigm where research, conservation, and societal impact intersect harmoniously.

Upon arrival at the CHTS, Pulau Redang, participants will be immersed in the living embodiment of SEATRU's sustainability and impact-driven initiatives. Guided tours and lectures delivered by SEATRU experts will unravel the intricate web of sea turtle conservation efforts cultivated since 1993. An integral aspect of this experience will be the interactions with fellow postgraduate researchers who have been instrumental in shaping SEATRU's achievements.

At the core of the "SEATRU Sustainability and Societal Impact Model" program lies a deep dive into the bond between research, conservation, and community dynamics. Engaging dialogues with local community members, who form an essential pillar of support for the sanctuary's activities, will underscore the tangible influence that research-driven conservation can have on livelihoods and local development. This interaction will provide participants with a firsthand understanding of societal progress's multifaceted dimensions stemming from the effective integration of research and environmental stewardship.

As the program unfolds, participants will delve into the principles underpinning SEATRU's

sustainability model. Dynamic workshops and thought-provoking discussions will illuminate how scientific research and responsible tourism intertwine to create a self-sustaining cycle, bolstering economic growth while preserving the delicate marine ecosystem. Practical learning experiences in the field, including observing nesting turtles and engaging in data collection, will offer participants a tangible connection to the intricacies of conservation in action.

Embedded within the program are reflective sessions designed to stimulate discourse and idea-sharing among participants. These sessions offer a platform to envision collaborative initiatives that resonate with the SEATRU model, fusing academic pursuits with tangible societal advancements. Ultimately, the "SEATRU Sustainability and Societal Impact Model" program seeks to foster a profound shift in participants' perspectives, empowering them to view their research as a conduit for lasting positive change. This immersive encounter will propel participants to weave together the fabric of research, collaboration, and societal betterment, mirroring the ethos of SEATRU's impactful journey. Through this transformative experience, participants will return equipped to infuse their academic pursuits with a commitment to environmental preservation and community enrichment.

RESULTS AND DISCUSSION

The "Beyond Lab Walls" initiative is designed to yield a transformative array of outcomes that redefine the impact of postgraduate education. Through an immersive journey of discovery, participants will be equipped with the tools, perspectives, and mindsets necessary to shape a new paradigm of research-driven societal change. The outcomes envisioned from this initiative are not just ambitious goals; they represent a concerted effort to empower postgraduates as catalysts for positive transformation in the world.

Empowered Communicators

The initiative envisions a cohort of participants who have honed their communication skills to convey intricate research ideas effectively to non-expert audiences. This outcome extends beyond academia, allowing participants to bridge the gap between specialised knowledge and broader understanding. Equipped with the ability to articulate complex concepts in accessible language, participants will unlock the power to foster broader engagement, making their research findings resonant and impactful across diverse communities.

Interdisciplinary Synergy

The "Beyond Lab Walls" initiative aspires to nurture a culture of collaboration that transcends disciplinary boundaries. Through interactions and experiences, participants will form cross-disciplinary connections, igniting a synergy that propels the creation of innovative solutions. As participants from different academic backgrounds converge, their collective insights will lead to the formulation of holistic approaches addressing multifaceted global challenges.

Research as a Catalyst

At the core of this initiative is the transformation of participants' perceptions regarding their postgraduate roles. By showcasing the potential for research to be a catalyst for positive societal change, the program seeks to internalise a profound sense of responsibility and purpose. Participants will embrace their capacity to drive development and transformation, leading to a cohort of postgraduates who are not just researchers but agents of tangible progress.

Enhanced Engagement

Dissemination of research findings beyond academic circles is a cornerstone of the "Beyond Lab Walls" initiative. Envisaged outcomes include the proliferation of research outcomes through diverse communication platforms. Participants will engage with a broader spectrum of stakeholders, from policymakers to industry leaders and the general public. This enhanced engagement will facilitate the integration of research into policy decisions, industry innovation, and informed public discourse.

In their entirety, these envisioned outcomes signify a profound shift in the landscape of postgraduate education. By bridging the gap between research and its tangible societal implications, the "Beyond Lab Walls" initiative aims to forge a generation of postgraduates who are not confined to the traditional boundaries of academia. Instead, they are armed with the skills, vision, and determination to extend their impact beyond the laboratory, shaping a world where research is an enduring force for positive change.

CONCLUSION

The "Beyond Lab Walls" initiative is not just an academic venture but a transformative voyage that empowers postgraduates to become torchbearers

of meaningful societal change. By embarking on this journey, participants are poised to break down the confines of traditional academia, radiating their research impact far beyond the laboratory walls. As we collectively embrace this paradigm shift, we take a step closer to a world where research is not an isolated endeavour but a catalyst for lasting societal progress. The future of postgraduate education is not confined; it is boundless and beckons us to imagine, innovate, and impact.

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